

Amendments to the Abstract

Please replace the Abstract with the following new Abstract:

This application is concerned with the controlled nucleation of solutes (i.e. dissolved solids) from solution. It has been found that the energy barrier for dissolved solids to nucleate is affected by the surface charge density of the reaction vessel (and hence the mass-to-charge ratio of vessel). The reaction vessel may, for example, comprise a levitated droplet of the solution having an "excess net charge". That is, ions present in the vessel of a single polarity are in excess of the counterions of opposite polarity. An increase in the surface charge density of the vessel (and hence a reduction in the mass-to-charge ratio of the vessel) causes the barrier for nucleation to decrease. These findings can be exploited using instruments commonly used in wall-less sample preparation to elicit selective control over the induction of nucleation and subsequent crystallization of target solutes of interest in the condensed phase.